

Placer County Health and Human Services Department

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State Water Resources Control Board Division of Water Quality Attn: Todd Thompson, P.E. 1001 I Street, 15th Floor P.O. Box 2231 Sacramento, CA 95812

SUBJECT: Comments on Proposed Amendments to the California Code of Regulation, Title 27,

Division 5. State Water Resources Control Board, Rules Governing Onsite Wastewater Treatment Systems (OWTS); Conditional Waiver of Discharge Requirements for OWTS;

and the Draft Environmental Impact Report (DEIR)

Dear Mr. Thompson:

The Placer County Health and Human Services Department, Environmental Health Division appreciates the opportunity to comment on the subject documents. The County of Placer is a rural County with 26,000 OWTS, as estimated by the DEIR. This represents 17% of the County's housing units.

Placer County strongly opposes the regulations and waiver as proposed. They will place an unnecessary burden on the citizens of Placer County and on the County itself. The regulations, as proposed would result in a severe financial impact to our residents and to our local county government. They are confusing, inconsistent, severely impact our existing effective local septic program, and may pose a threat to public health and water quality. Therefore, the County of Placer cannot support the proposed regulations and waiver as currently written. We also find the DEIR incomplete and inadequate.

Attached are comments on the three subject documents.

Sincerely,

Jill Pahl, R.E.H.S.

Environmental Health Director

cc: State Assemblyman Ted Gaines, 4th District State Assemblyman Dan Logue, 3rd District

State Senator Sam Aanestad, 4th District

State Senator Dave Cox, 1st District

Governor Arnold Schwarzenegger

Dorothy Rice, Executive Director State Water Resources Control Board

Tam Doduc, Chair State Water Resources Control Board

<u>COMMENTS ON THE PROPOSED OWTS REGULATIONS AND CONDITIONAL WAIVER OF</u> WASTE DISCHARGE REQUIREMENTS

TITLE 27, ENVIRONMENTAL PROTECTION DIVISION 5. STATE WATER RESOURCES CONTROL BOARD CHAPTER 1. ONSITE WASTEWATER TREATMENT SYSTEMS (OWTS)

SECTION 30000. SWRCB - Definitions

Major repair - The definition is flawed. Although surfacing sewage is a major concern, the repair may be relatively minor. For example, a clogged/crushed line out of a distribution box could cause surfacing effluent. This example should not be considered a major repair.

Qualified Professional - The term "construct" must be removed from this definition. The qualified professional designs the OWTS. A licensed contractor constructs the OWTS.

Service Provider- This definition lacks the specific qualifications one needs to provide the service. This may result in service that is less than professional and unscrupulous business dealings.

SECTION 30001 SWRCB Applicability. (b) - There are sections throughout the proposed regulations that appear to apply to existing systems, or left to interpretation whether they apply to existing systems. For example, Section 30013 (g) states "OWTS with supplemental treatment components shall be equipped with a visual or audible alarm as well as a telemetric alarm..." Because the statement does not exclude existing systems, it is unclear whether this applies to existing systems. Furthermore, since Section 30002 (j) specifically requires all new and existing OWTS with supplemental treatment to maintain a contract with a service provider, there is further confusion whether Section 30013 (g) and (h) apply to existing systems.

SECTION 30001 SWRCB Applicability. (c) 3 - Requires notification to the regional board when changing the use of an OWTS from domestic to commercial. The role of the regional board is unclear; it is unknown whether or not the local agency must wait for the regional board to respond or approve the application. This requirement will result in delays to providing adequate public service. Notification of the regional board should be based on a design flow threshold (current practice is above 10,000 gpd) and possible contaminants that may be discharged to the OWTS.

SECTION 30002 SWRCB General Requirements (a)(2) – This section allows OWTS to be designed and operated to accept wastewater from facilities that reduce high strength wastewater to below a 30-day average concentration of 250 mg/L BOD and 150 mg/L TSS effluent and prior to discharge to the septic tank. The proposed regulations fail to provide for situations where the system must be designed to accept high strength waste.

SECTION 30002 SWRCB General Requirements. (f) - A qualified professional employed by a local agency should not be limited to review and approval of designs for only *conventional* OWTS. Qualified professionals employed by a local agency should continue to be able to review and approve designs for supplemental treatment OWTS. Otherwise, all supplemental treatment OWTS design reviews and approvals must be performed by a regional board. This restriction will result in a major impact on the ability of local agencies to implement their current programs and creates a dramatic shift in workload from local agencies to the regional boards. This restriction is a potential conflict with the Business and Professions Code and the Health and Safety Code which specifically allows these qualified professional Registered Environmental Health Specialists to perform the work. The term "conventional" should be removed from this section.

SECTION 30002 SWRCB General Requirements. (g) – This section would allow someone holding a "General Building Contractor (Class B)" Contractor License the ability to install new and replaced OWTS. By definition of the California Business and Professions Code, a General Building

Contractor (Class B) is a contractor whose principal contracting business is in connection with any structure built, being built, or to be built for the support, shelter, and enclosure of persons, animals, chattels, or movable property of any kind... This type of contractor is typically involved with the coordination of subcontractors and most likely specializes in framing and carpentry. The installation of OWTS requires specialized skill and knowledge such as that required of Contractors holding a General Engineering Contractor (Class A) or Specialty C-42 license. Due to the complexity of OWTS, whether conventional or otherwise, and due to the needed skill and knowledge needed to properly install OWTS, someone holding a General Building Contractor License (Class B) should not be allowed to install OWTS systems. To assure proper installation of OWTS and to be consistent with the Placer County Onsite Sewage Ordinance, only those holding a license as a Sanitation System Contractor (Specialty C-42) or General Engineering Contractor (Class A) should be allowed to install OWTS. These two licenses assure specialized knowledge in fabrication and installation of OWTS.

This section would also allow a property owner to install his/her own OWTS. Due to the complexity of some OWTS, such as pressure distribution system, mound system, at-grade system or supplemental treatment system, we believe that a property owner should be prohibited from the installation of these systems, except for a conventional OWTS without pumping.

SECTION 30002 SWRCB General Requirements. (j) – Change the term "existing" to "replaced". To have this requirement be retroactive on all existing supplemental systems where it was not previously required and there is no evidence of improper maintenance is unnecessary.

SECTION 30002 SWRCB General Requirements. (p) and (q) - This section requires IAPMO approved septic tanks. It allows for other prefabricated tanks only if IAPMO approved tanks are not available, and the prefabricated tank has been stamped and certified by a California Registered Engineer. This requirement gives an unfair business advantage to IAPMO approved septic tanks. The engineer's stamp and certification should be equivalent in determining the quality of the tank. Therefore, these sections should be modified to allow IAPMO tanks or engineer's certification, regardless of the availability of IAPMO approved tanks.

SECTION 30002 SWRCB General Requirements. (s) and (t) - Groundwater quality monitoring with all domestic wells where OWTS are utilized is unscientific, unwarranted, impractical, and unjustifiably costly to the homeowner. As written, the water quality monitoring requirements seems to exceed the mandate of the legislation. A nexus does not exist between some of the constituents being tested and the OTWS as a source. Wells can become contaminated from a variety of sources, such as agricultural practices, poor well construction, etc. Therefore, the monitoring proposed may not lead to a causal relationship between the performance of the OWTS and presence of groundwater contamination. Well location or construction is not considered. Furthermore, the data would not provide reliable, accurate information to inform the development of future public policy.

We strongly advocate an approach where groundwater quality monitoring is required only when contamination of wells from OWTS is a realistic concern, and then only after a written monitoring program has been developed that is appropriate for the density and type of development with consideration of hydrogeology.

The constituents being tested should be limited to those that are prime indicators of contamination, such as coliform. This would be more cost effective for the homeowner. Furthermore, the State Water Resources Control Board should be required to provide a response and educational information directly to well owners where water quality testing identifies contamination.

Both the requirement for water quality testing and the results of the required testing will result in public demand for service and assistance at local agencies in the form of questions and direction. This will cause an increase in unrecoverable service costs for local agencies.

SECTION 30002 SWRCB General Requirements. (u) - This section recommends that the septic tank be pumped if the sum of the scum depth and sludge depth exceeds 25% of the septic tank depth as measured from the water line to the bottom of the tank. This recommendation is inconsistent with the Federal EPA's recommendations for septic tank maintenance, which recommends pumping when sludge exceeds 30% of the tank volume. The Federal EPA also recommends pumping the tank if the bottom of the scum layer is within 6 inches of the bottom of the outlet tee or the top of the sludge layer is within 12 inches of the outlet tee. We recommend the regulations maintain consistency with the EPA guidelines regarding maintenance.

SECTION 30002 SWRCB General Requirements. (v) - This section recommends that the regenerating saline backwash from water softeners not be discharged either to OWTS or to the ground in any manner. If this recommendation is included, it should also state a method(s) for the proper disposal of saline backwash from water softeners.

SECTION 30012 SWRCB - Groundwater Level Determination for New OWTS. (b) – This section allows for the use of well driller information to determine the high groundwater level. Well driller information would not be an accurate or reliable way to determine high ground water levels. The information gathered in the well driller's information is not designed for the purpose of determining high ground water and would not provide information useful for determining high ground water. We believe this is an ill conceived idea, does not provide guidance as to what specific information will be used, does not describe how the information will be used to determine seasonal high ground water, and would lead to inaccurate and unstandardized interpretations. Lastly, it is unclear what the term "information" refers to in the phrase, "well driller information."

SECTION 30012 SWRCB - Groundwater Level Determination for New OWTS. (b) - This section must be modified to allow jurisdictions to practice their current methods of winter groundwater determinations. Jurisdictions have effective methods of performing groundwater monitoring that provide measurement of sustained high water elevations in association with wet weather conditions. The requirement for continuous monitoring from November 1 to April 1 will be an unnecessary hardship for property owners.

SECTION 30013 SWRCB- Performance Requirements for Supplemental Treatment Components. – There is a critical need for providing statewide support for the local agencies administering and enforcing new statewide standards that will result in greatly expanded use of supplemental treatment.

A statewide entity must be established to review and approve supplemental treatment technology, both proprietary and non-proprietary. The entity would establish a list of reviewed devices and technologies with guidelines for their proper siting, design, installation and operation. This would ensure statewide consistency in the use of approved proprietary and non-proprietary devices and technologies.

The alternative of county-by-county review and approval, even with third-party laboratory testing, would be unnecessarily redundant, costly, and inefficient. The resources needed to review supplemental treatment technologies for initial program approval may not be present within the organizational structure of all local agencies, which are otherwise experienced and proficient in administering an OWTS program.

SECTION 30013 SWRCB- Performance Requirements for Supplemental Treatment Components. (a) - This section allows local agencies or the regional boards to require supplemental treatment systems for any existing OWTS where treatment is needed to mitigate for insufficient soil depths or to provide for protection of the water quality and public health. This requirement is too broad and open-ended. It is unclear how many inches of insufficient soil depth can be mitigated with supplemental treatment.

SECTION 30013 SWRCB- Performance Requirements for Supplemental Treatment Components. (d) — Nitrogen treatment to 10 mg/l 30 day average is not attainable with current

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treatment methodologies. No adequate supplemental treatment devices are currently available for variable single residence flows.

SECTION 30013 SWRCB- Performance Requirements for Supplemental Treatment Components. (e) - Criteria and standards should be included to define an acceptable independent third party testing laboratory.

SECTION 30013 SWRCB- Performance Requirements for Supplemental Treatment Components. (g) - Section 30001 (b) states "Requirements in this Chapter apply to existing OWTS only where specifically indicated." However, there are sections throughout the proposed regulations that appear to apply to existing systems, or left to interpretation whether or not they apply to existing systems. For example, Section 30013 (g) states "OWTS with supplemental treatment components shall be equipped with a visual or audible alarm as well as a telemetric alarm..." Because the statement does not exclude existing systems, it is unclear whether this applies to existing systems. Furthermore, since Section 30002 (j) specifically requires all new and existing OWTS with supplemental treatment to maintain a contract with a service provider, there is further confusion whether Section 30013 (g) and (h) apply to existing systems. Retrofitting existing sand filter systems with telemetry would be a burdensome expense for homeowners. Placer County recommends that existing sand filter systems be exempt from Sections 30013 (g) and (h).

SECTION 30013 SWRCB- Performance Requirements for Supplemental Treatment Components. (g) – This Section requires a system with supplemental treatment components to be equipped with a visual or audible alarm as well as a telemetric alarm that alerts the owner and service provide in the event of a system malfunction. It is unclear in this section and not provided elsewhere in the proposed regulations exactly what will be monitored by the alarm system and what the minimum performance requirements are.

SECTION 30014 SWRCB Dispersal Systems. The prescriptive standards contained in this section should be removed. The following are examples justifying this request.

SECTION 30014 SWRCB Dispersal Systems. (a) - This section should be modified to require the base of the dispersal system to be installed at the shallowest practicable depth below the original elevation of the soil surface. This modification would eliminate the preference for at-grade systems, suggested in the current language. The risk associated with surfacing effluent at the natural soil interface would also be avoided. This risk of surfacing effluent associated with dispersal systems at above-grade was identified and discussed in the DEIR.

This section does not provide for deep trench systems which is a safe and effective alternative to shallow trench systems. These systems must be installed deeper than 30 inches in order to mitigate for a shallow limiting layer, such as a hard or clay pan. Applying this paragraph as proposed, could result in many parcels being unbuildable.

SECTION 30014 SWRCB Dispersal Systems. (b) - This section prescribes the utilization of only bottom area for sizing of trenches and the infiltration rates. This is not the current practice for most local jurisdictions. This is not specifically supported in the DEIR. OWTS utilizing sidewall as the infiltrative surface should continue to be allowed. The proposal that sidewall be considered for septage pits is inconsistent with the sole use of bottom area. The use of sidewalls for design is more protective of public health.

SECTION 30014 SWRCB Dispersal Systems. (c) 1 and (d) 1 – Figure 2: Minimum Depth of Earthen Material - The curve in Figure 2 should be shortened to include a maximum fraction of allowable rock in earthen material. For example, it is not suitable to have 90% rock with a 20-foot depth requirement for effective soil depth.

SECTION 30014 SWRCB Dispersal Systems. (c) - Specifies 30% rock by *weight* as a maximum limit should be modified to specify 30% rock by *volume*. Field analysis for siting OWTS does not use equipment to weigh material. It is the size of the rock, not the weight that matters.

SECTION 30014 SWRCB Dispersal Systems. (e) - The use of imported soil should not be allowed as a portion of the effective soil depth until it is scientifically proven to perform adequately. Native soils have specific properties inherent to it that can't be replaced by engineered fill. Imported soil used as a portion of the effective soil depth has been problematic and not been effective. It is specifically discussed in the DEIR on page 2-4 that the fill/natural soil interface (referred to as the infiltrative surface) is an area where failures occur because of the inability of the surface to accept wastewater. Allowing the use of imported soil will result in greater occurrences of surfacing sewage, an increased number of service calls, complaints and needed repairs. Homeowners will be strapped with unforeseen costs and problems; and local jurisdictions will incur additional costs for calls for service. It is appropriate however, to use imported soil as backfill cover (in a capping fill) above native grade for the dispersal system, provided the rock portion (or equivalent) of the dispersal system is totally contained within suitable native soil.

SECTION 30014 SWRCB Dispersal Systems. Figure 1: Design Infiltrative Surface Application Rates - This graph is too difficult to read. A mathematical formula should be provided for accurate calculation of application rate based on percolation rate in minutes per inch.

SECTION 30014 SWRCB Dispersal Systems. (j) — This section limits the application rate for dispersal systems to a maximum of four square feet per emitter/orifice. This section is combining requirements for both pressure distribution and drip systems. While industry practice for sizing of drip systems is four square feet per emitter. Industry practice for pressure distribution systems is 18 square feet per orifice. This is because the orifice is set at six feet on center. Should this section be adopted as written, this would result in an increase of the area of the dispersal field for pressure distributions systems by three to four times the current practice. Pressure distribution and drip are two very different dispersal methods that should not have the same requirements for application.

SECTION 30014 SWRCB Dispersal Systems. (k) 3 - This section is in direct conflict with Section 30014 (k) 2. All of Section 30014 (k) 3 should be deleted as that it is not protective of public health.

SECTION 30014 SWRCB Dispersal Systems. (k) 3 (C) - This section allows seepage pits with supplemental treatment to discharge into an area with less than two feet of unsaturated, undisturbed soil beneath the bottom of the seepage pit and actually provides for no minimum amount of unsaturated, undisturbed soil beneath the bottom of the seepage pit. This section should be removed entirely, as it would not adequately protect the public health or groundwater quality.

GENERAL COMMENTS:

- 1. Although the DEIR state these regulations will be self-implementing, the draft regulations do not specifically state this nor do they exempt the local agency from implementation or enforcement.
- 2. The requirements of the draft regulations are onerous and will result in unscrupulous business practices, including illegal repairs, and illegal dumping of septage after pumping the tank. The inadequate definition of "service provider" coupled with the proposed service requirements will result in unscrupulous business dealings from operators who will try to take advantage of the unsuspecting homeowners who do not understand the regulations nor their septic systems. Because there is no license or certification for the "service provider," homeowners will have no recourse to report an unprofessional or dishonest service provider.
- 3. Replacement of failing OWTS cannot always meet current requirements due to lack of effective soil depth, available area, etc. In the interest of public health, a best case OWTS replacement utilizing supplemental treatment should be allowed on a case by case basis, at the discretion of the local agency for an existing uses and structures. The regulations should include a specific allowance for these situations. Existing local ordinances provide adequate protection
- 4. Variance procedures should be added to the proposed regulations to address situations where the parcel cannot meet the minimum requirements. Also there should be a grandfather clause for addressing lots created and systems approved prior to the implementation of the regulations.

- 5. Sanitary surveys are conducted for public water systems throughout the state. While the surveys consider potential impacts related to septic systems there has not proven to be such impacts in Placer County.
- 6. Past experience has shown that there is a wide variability between regional boards in on-site sewage requirements and that this variation is based on philosophical differences rather than differences in local conditions. Inconsistency has also been noted in differential treatment of jurisdictions within the same regional board areas. Therefore, we recommend the following:
 - A specific mechanism should be defined in this document that allows the local agency to appeal regional board decisions to the state board when the two entities have reached an impasse. The regulation development process should not sidestep difficult or contentious issues by deferring them to a future Memorandum of Understanding process.
 - Every effort must be made to develop regulation that is comprehensive and definitive so that individual local agencies are not subject to inequitable treatment.
 - Provisions must be established in the regulation to preclude regional boards from dictating stricter local requirements by Resolution rather than the potentially future negotiated Memorandum of Understanding mutual process.

COMMENTS ON THE PROGRAM DRAFT ENIVONMENTAL IMPACT REPORT AB 885 ONSITE WASTEWATER TREATMENT SYSTEMS

SUMMARY

S.5.2 Implementation of the Proposed Regulations page S-2 states that the proposed regulations would be largely self-implementing, requiring actions to be completed by the property owner/operator, and the proposed statewide waiver would be self-implementing as well. However, the proposed regulations do not state that the requirements would be self implementing. It is likely that the local regulatory agencies will be required to implement and enforce these regulations as part of the Water Board's approval process for local regulations governing onsite sewage treatment systems. The DEIR fails to address impacts to agencies tasked with enforcement activities related to these regulations. Although the environmental document states that OWTS owners will be responsible for conducting monitoring of water wells and septic tanks, in the likely event that OWTS owners fail to perform monitoring activities, a regulatory agency would likely be tasked with enforcing these regulations. It would be virtually impossible to enforce well water monitoring and septic tank solids evaluation requirements without a comprehensive data collection system and cost recovery mechanism. This increased cost to the public and to the local regulatory agency was not addressed in the DEIR.

1.0 INTRODUCTION

- 1.6.2 Agricultural Resources page 1-5 states "that the proposed project would not be expected to increase the number of OWTS that would be placed on farmland, nor would it meaningfully (if at all) alter the amount of farmland converted for use to OWTS-related uses because zoning designations are established by local land use jurisdictions. Therefore, the potential impacts of the proposed project on such farmland are considered less than significant." This section of the environmental document does not adequately evaluate the potential for increased development in areas where installation of OWTS is limited by lack of adequate soil depth, including parcels currently used for farmland. In the event that a local agency requires greater than 2 feet of vertical separation and does not allow for a reduction of this requirement with supplemental treatment or engineered fill, implementation of the proposed regulations could allow for installation of OWTS on parcels where development was previously restricted due to inadequate soil depth. A statewide allowance for the use of OWTS with 2 feet of vertical separation with supplemental treatment, or even shallower soils using engineered fill, could potentially allow for increased development of parcels currently used for farmland, without necessarily altering the land use designation.
- 1.6.3 Air Quality page 1-5 states that "the proposed project would not be expected to increase the number of OWTS that would be constructed in the future, nor would it meaningfully, if at all, alter the amount of land converted to OWTS-related uses". This section of the environmental document does not adequately evaluate the potential for increased development in areas where installation of OWTS is limited by lack of adequate soil depth. In the event that a local agency requires greater than 2 feet of vertical separation and does not allow for a reduction of this requirement with supplemental treatment or engineered fill, implementation of the proposed regulations could allow for installation of OWTS on parcels where development was previously restricted due to inadequate soil depth. A statewide allowance for the use of OWTS with 2 feet of vertical separation with supplemental treatment, or even shallower soils with engineered fill, could potentially allow for increased development of parcels that are currently non-developable.

This section also does not adequately analyze the increase to green-house gases due to the additional service trips by septage haulers to service OWTS and to haul the waste to a facility that accepts the waste. There are limited facilities to accept liquid waste, resulting in the need to go as far as out-of-state.

This section states that "the proposed project would not be expected to increase the number of OWTS that would be constructed in the future, nor would it meaningfully, if at all, alter the amount of land converted to OWTS-related uses". However, there are very few facilities that accept pumped effluent. The volume of pumped effluent and the capacity of existing facilities to accept the effluent was not analyzed. It is our estimation that demand would exceed current capacity for facilities to accept the effluent. This would result in the need to build additional facilities. The impacts to air quality due to the requirement to build additional facilities and due to the processing of the waste at these facilities were not analyzed in the DEIR. Furthermore, the impact to air quality due to the need to haul the dried biosolids to an acceptable location was not taken into account.

- 1.6.7 Public Services page 1-7 states that implementing the proposed project is not anticipated to increase the staffing requirements of the State Water Board, Regional Water Boards, or local agencies. Any staffing increases that may result would be minimal and would not be large enough to require construction of new facilities. Therefore, this impact is considered less than significant." Implementation of requirements for monitoring for all existing supplemental treatment systems, inspection of solid levels in septic tanks and well water quality monitoring, serving as a public resource for the regulations by answering questions, etc as proposed in the regulations could contribute to staffing requirements at the local agencies. Also, on a statewide level it can be assumed that some local agencies will need to upgrade their site evaluation and inspection programs to meet the regulations' standards. This would result in increased staffing requirements for some local agencies.
- **1.6.7 Public Services page 1-7** Currently there are an inadequate number of facilities to accept effluent from septage pumpers. Increased demand for recipients of septage pumper effluent could result in a need for additional facilities or increased capacity at existing facilities that accept septage pumper effluent. This increased cost of facilities, capacity and personnel were not analyzed in the DEIR. Likewise limited adequate facilities to accept septage pumper effluent in addition to the cost of disposal at facilities that accept the waste may result in illegal dumping of the septage waste. Illegal dumping will increase costs for local jurisdictions responding to and investigating such incidents. This additional public service need was not addressed in the DEIR.
- 1.6.9 Traffic page 1-7 states vehicle trips due to septic tank inspections would be infrequent, and in rural areas. It concludes the resulting traffic impact would be less-than-significant. We believe the traffic impact due to septic tank inspections was not adequately analyzed in the DEIR. According to the DEIR there is projected to be over 1,460,000 housing units with OWTS by the year 2013. This would result in approximately 292,000 service calls if 1/5 of them was inspected each year. Although the homes are typically found in rural areas, the septage hauler must drive a significant distance to reach the rural areas, most often travelling to neighboring counties to service the systems, and even across state lines to dispose of the pumped effluent. It can be calculated that each service would result in a minimum of two one-way trips, and three to four one-way trip if the hauler must also dispose of the effluent. Furthermore, the increased demand for facilities to accept the waste will increase the volume of dried biosolids, which will result in the need to increase the number of trips to haul the biosolids to an acceptable location. In many cases, the biosolids must be hauled out of state due to the limited number of facilities to accept the biosolids within California. This could result in upwards of over a half a million additional long-distance trips per year. We believe this to be a significant impact.

2.0 BACKGROUND AND PROJECT DESCRIPTION

Section 2.2.2 Dispersal System Design: States for systems constructed in fill material: "This secondary infiltrative surface (created at the fill/natural surface interface) is sometimes the area where OWTS failure occurs because of the inability of that surface to accept wastewater." However in the discussion of Wastewater Distribution Methods where fill is described under "Mound System (page 2-6), the risk of failure and the reason why some local jurisdictions do not allow engineered fill is not discussed. For example, under the seepage pit section (page 2-7), the negative impacts to

seepage pits are discussed and it is mentioned as a reason why some local jurisdictions do not allow them.

Furthermore, although it is clearly stated in Section 2.2.2 that systems constructed with engineered fill are subject to failure at the infiltrative surface, these systems are recommended to be used to mitigate for inadequate soil depth in the proposed regulations. There are currently an unknown number, but surely a great amount of bare lots with inadequate soil. Approval of engineered fill to mitigate for shallow soils will increase the demand for these systems. Nothing in the DEIR discusses the impacts due to increased incidents of surfacing sewage due to failing systems installed in fill. Nor does it discuss the impact to the public health due to exposure to surfacing sewage. Neither does it discuss the impact to surface nor groundwater due to surfacing sewage that is likely to happen with this type of system. Furthermore, the DEIR do not provide for adequate design guidelines or mitigation measures to prevent surfacing sewage at the infiltrative surface.

Table 2-4 Estimated Locations and Numbers of OWTS Adjacent to Impaired Water Bodies – This table identifies as Wolf Creek as being located in Placer County. This creek is not located in Placer County. The correct location is Nevada County.

2.7.3 Human Exposure to OWTS-Degraded Groundwater, pages 2-25 and 2-26:

The DEIR states that domestic water supply wells are vulnerable to pollution from OWTS effluent plumes and that the 600,000 or so domestic wells in California may be vulnerable to pollution from the discharges from existing or yet-to-be-installed OWTS.

In most cases, if OWTS and water wells are properly sited, designed, constructed and maintained, OWTS will not result in a significant contribution to groundwater pollution. OWTS in 303d listed areas should be addressed separately.

The information referenced in the DEIR regarding water quality testing of existing water wells was not designed to identify pollution sources and cannot be used to link pollution from OWTS to these water wells. However, on page 2-27 the DEIR states that "it is reasonable to conclude that effluent from on-site systems... is a potential source of contamination for nearby domestic wells because of the short travel distance between many on-site systems and domestic well ... and the inherent vulnerability of these wells." Per the State of California Water Well Standards Bulletin 74-81 a water well setback of 100 feet is required from a subsurface sewage leaching field and a 150 foot setback is required from a seepage pit. The water quality of properly constructed wells which meet required setbacks to properly sited, designed, constructed and maintained OWTS meeting vertical separation requirements should not be impacted by OWTS. The "inherent vulnerability" of properly constructed water wells has not been demonstrated in the DEIR. Any substandard water well issues should be addressed separately in water well standards/regulations and was not mandated in the legislation.

- 2.11.2 Section 30001, SWRCB- Applicability- page 2-32 states that a "property owner" must notify the applicable regional board before a number of specific actions, including operating a new OWTS...that has a capacity of more than 3,500 gallons per day; changing the nature (e.g., from domestic to commercial) of the waste stream entering an OWTS... etc. Current practice is referral for facilities producing 10,000 gpd. The regulations use the term "person", which could also include a local agency. The regulations need clarification regarding who is responsible for this notification, it is unclear if this notification is required solely from the OWTS owner or if the local agency is also required to notify the applicable regional board.
- **2.12 Implementation of the Proposed Regulations, page 2-36** states that the proposed statewide waiver would be *self-implementing* and that as long as a property owner ensures that his or her OWTS complies with the requirements of the regulations and the waiver, no additional permit or review would be required. Failure to comply... could result in enforcement..." Neither the regulations nor the waiver clearly specify that they will be self-implementing. This issue must be clear so that it is understood that local agencies are not responsible for enforcing actions required by the legislation, such as monitoring of solids in septic tanks and well water quality testing.

Section 2.2.3, Page 2-8 States: "The effluent filters must be cleaned at regular intervals, as recommended by the manufacturer and depending on usage to remove accumulated solids from the screen to prevent system backups into the building served by the OWTS." A typical homeowner will not know to clean this filter, which will result in the system backing up. Furthermore, most homeowners will not find it palatable to clean the filter themselves. Therefore, the homeowner will be subject to costs of maintenance of the filter on a regular basis. Costs of this additional maintenance and service to the homeowner are not discussed in the DEIR.

4.0 ENVIRONMENTAL ANALYSIS

Requirements for Use of Supplemental Treatment Components, page 4.1-50: "The proposed regulations provide local agencies and the Regional Water Boards with the authority to require the use of supplemental treatment components with any existing or new OWTS where conditions provide less than 3 feet but more than 2 feet of continuous undisturbed, unsaturated soil below the bottom of the dispersal system, and/or where additional treatment is needed to protect water quality and public health (Section 30013 and 30014(d))." The ability to require supplemental treatment for existing OWTS in this situation is too broad and open-ended, as written. The regulations do not specify criteria to determine when this additional supplemental treatment is "needed to protect water quality and public health"; therefore this requirement could be imposed by a regional board on a wholesale basis. The potential impacts of this requirement have not been adequately addressed. The potential numbers of such OWTS upgrades has not been defined and the costs to property owners with such OWTS would be large. The financial impact would be significant. The ability to require supplemental treatment for existing OWTS should be limited to those existing OWTS as addressed in the 303(d) impacted water section, or when OWTS are replaced or when there is a proposed change of use, replacement of the structure served by the OWTS or a proposed increase in wastewater flow.

Mitigation Measure 4.1-5 Modify the Regulations to Include the Requirement that All New or Replaced OWTS, Regardless of the Dispersal System Design, Shall Include a Supplemental Treatment Unit That Provides Nitrogen Removal, page 4.1-55:

"If mitigation measure 4.1-5 is implemented, discharges from all new or replaced OWTS would meet the water quality objective for nitrate-nitrogen (10 mg/l) at the point of compliance. As stated above, this is a potential impact, and may not occur in all soil and groundwater conditions."

By requiring mitigation where the impact may not occur it results in an undue burden to the property owner. Also, the DEIR does not discuss situations where nitrate contributions from OWTS are small relative to other sources. The DEIR should include a quantitative analysis of the relative extent to which other sources may be contributing more significant sources of nitrogen, this is necessary in order to ensure that the mitigation measure will be effective. The costs to OWTS owners resulting from the implementation of mitigation measure 4.1-5 would be extremely high compared to minimal benefit to water quality. In addition 10 mg/l is not attainable with the current treatment units available.

Nitrogen contamination from OWTS is already addressed in the regulations which require supplemental treatment with nitrogen reduction in areas listed as 303(d) with nitrogen contamination identified as an issue. It is not warranted to require this level of treatment for OWTS for all new and replaced OWTS statewide.

The DEIR states that "the state, in cooperation with EPA has set aside funds from its State Revolving Fund Program that can be made available to local qualified agencies who can then provide low-interest loans to homeowners to install, repair, replace or upgrade their OWTS. The homeowners would still bear the primary financial responsibility for these improvements, but could potentially tap into lower interest loans." Implementation of this program on a statewide scale would

result in a huge potential need, and it is unlikely the State Revolving Fund has an adequate amount of loan funding available through the described mechanism.

The current State fiscal crisis also makes adequate loan funding unlikely. Even if loan funding were available, the homeowner would still bear the cost. Due to the national (and state) economic crisis, it is difficult to secure credit and many people are losing jobs. It is likely that many people needing loans to meet this requirement, could not qualify. Additional costs to the state and local government to process, manage and collect on any loans through the State Revolving Fund must also be considered. It is unlikely that local agencies have the staff to provide oversight and distribution of these funds.

Implementation of this mitigation measure would be cost prohibitive. The DEIR does not include a complete and detailed financial analysis of the fiscal impacts resulting from implementation of this mitigation measure. Such an analysis must be included in order to make a realistic cost-benefit comparison and in order to ensure that the mitigation measure will be effective and feasible.

The cost to implement this mitigation measure is not justified and the need for mitigation measure 4.1-5 has not been adequately demonstrated.

MITIGATION MEASURE 4.1-7 page 4.1-58 - Same comments as above

Page 4.2-18 of the DEIR states that "other key beneficial components (outlined above) include more stringent and consistent monitoring of domestic wells on sites with OWTS, which may lead to the identification of an OWTS-related contamination issue long before there are effects to biological resources." The need for water quality monitoring of domestic wells on sites with OWTS has not been adequately demonstrated.

Page 4.2-18 of the DEIR states that "supplemental treatment systems may be required in other sensitive areas (near wetlands, anadromous fish habitat, estuaries) that are not currently listed as 303(d) impaired waters under the proposed regulations." This is not stated in the proposed regulations.

Impact 4.2-2 Impacts on Fisheries, Sensitive Habitats and Communities, Special-Status Species, and Federally Protected Wetlands from Construction of OWTS in Targeted Areas of Impairment, page 4.2-19: "All OWTS in targeted areas of impairment would be required to include supplemental treatment. Existing OWTS in these areas that need to be replaced or significantly upgraded to comply with this requirement must do so within a 2-year time frame."

The impact does not appear to match the regulations and the impact also conflicts with the discussion. The regulations do not require **all** OWTS in targeted areas of impairment to include supplemental treatment, but speaks to new OWTS and existing OWTS that have been determined to be contributing to the impairment in these areas only. The referenced 2-year time frame above is incorrect. See section 30040 of the regulations.

Table 4.3-3 page 4.3-52: Local Implementation Proposed Project cell of table incorrectly states that "Must notify regional water Board for work on OWTS larger than 5,000 gpd..." The wastewater threshold specified in the proposed regulations is 3,500 gpd. Current practice is referral of systems greater than 10,000 gpd.

DEIR General Conclusions from Table 4.3-2 - Use of Engineered Fill; page 4.3-54

"Also, the allowance for engineered fill would increase the effectiveness of the infiltration process, therefore, the allowance for use of engineered fill would not conflict with local land use regulations that have been adopted to avoid and mitigate potential effects to the environment."

The DEIR does not adequately evaluate the impacts of the use of engineered fill. In actuality, use of engineered fill for OWTS would result in greater potential for surfacing sewage and therefore result in an increased threat to the public health and the environment by increased pathogen exposure. Placement of an OWTS effluent distribution network within an engineered fill system (which is above native grade) is likely to cause sewage bleed out to the ground surface at the fill-native soil interface (as stated in the DEIR on page 2-4). Therefore, the effectiveness of the infiltration process is not increased, but rather decreased.

The use of imported soil (engineered fill) should not be allowed as a portion of the effective soil depth. Imported soil (engineered fill) used as a portion of the effective soil depth has been problematic and has not been effective (see page 2-4 of the DEIR, second paragraph). Use of imported soil (engineered fill) should not be approved as proposed until it has been definitively shown to perform adequately in actual practical field conditions as a part of the OWTS. It is premature to provide for this type of use and should certainly not be included in statewide regulations at this time. It is appropriate to use imported soil as backfill cover (in a capping fill) above native grade for the dispersal system, provided the effluent dispersal system is totally contained within suitable native soil. The DEIR does not contain information which demonstrates that the use of engineered fill for OWTS, as contained in the regulations, would be an effective method of sewage disposal and would not result in sewage discharge to the ground surface.

5.0 SUMMARY OF FISCAL AND ECONOMIC ANALYSIS OF THE PROPOSED PROJECT

- **5.2.3 Representative OWTS Design, Installation, and Maintenance Costs:** Estimate the cost of services, such as septic tank inspection, pumping, and well water testing. These costs are underestimated, and also deceiving. The cost is represented as the cost for service equals the amount provided, however it is discussed later that the cost is annualized. Therefore, it is confusing to understand that should services be provided every five years, that the cost for the service is five times the amount stated. The costs should be provided so at to be understandable by the typical home-owner.
- **5.4.2 Private Sector Costs, Baseline Conditions, Unit Costs, page 5-15**: Determination of High Groundwater Level: The DEIR states that the cost for a one-time groundwater level determination is estimated to range from \$1,000 to \$1,500, with a midpoint cost of \$1,250. The proposed regulations do not specifically allow a one-time groundwater level determination for siting of OWTS. The regulations state that "measurements of depth to seasonal high groundwater shall be conducted between November 1 and April 1 unless otherwise specified by the Regional Board. Groundwater levels shall be measured continuously using a piezometer to record the seasonal high groundwater level." Regional Boards may approve an alternative protocol for determining seasonal high groundwater levels as established in the basin plan. However, since Regional Boards are not required to do this, there is no guarantee that a one-time seasonal groundwater level determination protocol would be approved. The DEIR does not address the fiscal impact of monitoring seasonal high groundwater levels continuously with a piezometer from November 1 to April 1. Analyzed costs must also include installation, monitoring and reporting costs of this groundwater level measurement.
- **5.4.5 Effects of the Proposed Project on Property Value and Real Estate Transactions, page 5-28**: "Based on the draft regulations, the reporting of water quality monitoring data to the State Water Board would result in either minor or no effects on real property transactions since the

addresses or specific locations where samples are taken will not be available to the public, except in cases where a domestic well is found exhibiting pollution from human activities. In such cases, the quality of the water would be required to be reported in the real estate property disclosure statement."

In this paragraph, the DEIR is in conflict with the proposed regulations. The proposed regulations clearly state that the names and addresses of owners of tested domestic wells shall not be released. No exceptions are provided. Release of this information would present privacy issues and potentially affect property values. If the state will release the information as part of the real estate disclosure process, then the regulations should clearly state this. The DEIR did not adequately address the potential impact to property values due to disclosure of water quality of the onsite well.

The DEIR states that "If the vertical separation to groundwater requirement in the draft regulations were more protective than existing vertical separation to groundwater requirements enforced by local agencies, then the proposed project could restrict development on some lots... Such situations are not expected or would be rare." This would not be the case. Realistically, it can be expected that since multiple jurisdictions use a smaller vertical separation requirement, build ability of existing parcels with regard to sewage disposal would be negatively affected in a significant way and property values would be affected. Disallowance of sidewall infiltration for deep trench OWTS could keep some very small existing parcels with deep well-drained soil from being buildable.

5.5 Financial Assistance for Property Owners

The DEIR and the legislation (AB885) state it was the intent of the California Legislature to encourage financial assistance to existing OWTS owners that incur costs as a result of the new statewide regulations required by the legislation. Specifically Section 13291.5 states "The State, in cooperation with EPA has set aside funds from its State Revolving Fund Program that can be made available to local qualified agencies who can then provide low-interest loans to homeowners to either install, repair, replace or upgrade their OWTS. The homeowners would still bear the primary financial responsibility for these improvements, but could potentially tap into lower interest loans." Implementation of this program on a statewide scale would result in a huge potential need, and it is unlikely the State Revolving Fund has an adequate amount of loan funding available through the described mechanism.

The current State fiscal crisis also makes adequate loan funding unlikely. Even if loan funding were available, the homeowner would still bear the cost. Due to the national (and state) economic crisis, it is difficult to secure credit and many people are losing jobs. It is likely that many people needing loans to meet this requirement, could not qualify. Additional costs to the state and local government to process, manage and collect on any loans through the State Revolving Fund must also be considered. It is unlikely that local agencies have the staff to provide oversight and distribution of these funds.

The discussion contained in section 5.6.1, page 5-29 states that "Members of the public seeking water quality monitoring data would be able to obtain data from public Web sites but would not be able to determine the specific location or address from which a sample was taken." This statement is in direct conflict to the statement on page 5-28 section 5.4.5. and is not addressed in the regulations at all. The regulations do not specify what is to be done with the water quality data. If this data were released in broad, general location terms, it could still possibly affect the property value of an individual parcel if the data is in the general area of the parcel.

5.6.1 Effects of the Proposed Project on Local Agencies

The discussion of the DEIR states that "...the draft regulations are anticipated to be largely self-implementing. The draft regulations would minimize agency staffing and cost effects by requiring OWTS owners to comply with the new regulations, as they follow the existing permit processes of

their local and regional agencies, rather than requiring local and regional agencies to do new regulatory oversight, tracking, monitoring, and reporting activities." This is not stated in the regulations. In fact, it seems that if a local agency obtains approval from a Regional Board to implement the regulations, then the regulations must be enforced in their entirety. Self-implementation is not specified in the regulations. This seems to result in an unfunded mandate. Also see comments under 1.6.7 Public Services, page 1-7.

The discussion contained in this section also states that "Members of the public seeking water quality monitoring data would be able to obtain data from public Web sites but would not be able to determine the specific location or address from which a sample was taken." This statement is in direct conflict to the statement on page 5-28 section 5.4.5.

It seems that the regulations could potentially create an increased staffing need at the Regional Boards, especially if local agencies do not request/receive authority to implement legislation.

Water Well Testing Requirements: The DEIR does not sufficiently demonstrate the need for well water quality testing as proposed in the regulations. Water quality testing is required for a well that could be located up or down slope of and many hundreds of feet away from an OWTS on the parcel. Justification is not provided for the broad array of constituents that are required in the water quality analysis. Many of these constituents are not indicators of the impacts of OWTS on well water quality. Generally, OWTS that are properly designed, sited, constructed and operated should not impact water quality. The regulations should only address requirements for well water quality testing for sites with OWTS that are listed as 303d, and only for relevant constituents.

6.0 ALTERNATIVES TO THE PROPOSED PROJECT

Considering the limited benefits to environmental quality and the total costs of implementation, the range of project alternatives selected for analysis in the DEIR is inadequate. There are many alternatives to significant independent elements for the proposed regulation that should be considered and evaluated individually. For example, an alternative could be considered that removes the proposed requirement for water well testing. Many other viable alternatives are possible besides the "take-it-or-leave-it" alternative.

7.0 OTHER CEQA-REQUIRED SECTIONS

7.1.4 Potential for the Proposed Statewide Regulations to Induce Growth, page 7-5:

The DEIR states that "... the nine Regional Water Boards would each recognize the new regulations for OWTS by proposing adoption of an amendment and incorporation by reference of Chapter 7 of the Water Code, Onsite Wastewater Treatment Systems." The details of the implementation process are not clearly described and the timeline and level of effort for this is not addressed. The DEIR does not explain the mechanism or timeline that will be used to incorporate the regulations into the basin plans or explain how this process/timeline may impact regulatory implementation.

Section 7.1.5. speaks to unknown growth inhibitions. Among other things the proposed use of bottom area for trench design, vertical separation, will have the potential to limit property development. The DEIR failed to evaluate the needs of local governments to meet their Housing allocation goals.

Section 7.2.6. speaks to cumulative traffic impacts. The monitoring requirements will require additional trips above those currently conducted causing additional vehicle miles traveled. The DEIR fails to quantify and analyze this contribution to increased greenhouse gas emissions.